

In the Claims:

Please amend claims 1-43, as follows:

1. (Currently Amended) A beam optical component comprising a charged particle lens ~~(1; 1000)~~ for focusing a charged particle beam ~~(3)~~, the charged particle lens ~~(1; 1000)~~ comprising:

a first element ~~(5; 1005)~~ having a first opening ~~(7)~~ defining a first space through which the charged particle beam ~~(3)~~ can propagate;

a second element ~~(9; 1009)~~ having a second opening ~~(11)~~ defining a second space through which the charged particle beam ~~(3)~~ can propagate; and

first driving means ~~(13)~~ coupled to at least one out of the first element ~~(5; 1005)~~ and the second element ~~(9; 1009)~~ for aligning the first opening ~~(7)~~ with respect to the second opening ~~(11)~~.

2. (Currently Amended) The beam optical component according to claim 1, whereby the charged particle lens ~~(1; 1000)~~ comprises a third element ~~(25)~~ having a third opening ~~(27)~~ for focusing ~~focussing~~ the charged particle beam ~~(3)~~.

3. (Currently Amended) The beam optical component according to claim 2 ~~any one of the preceding claims~~, whereby the geometry of the first, second or third opening ~~(7; 11; 27)~~ defines a respective first, second or third central axis ~~(47)~~.

4. (Currently Amended) The beam optical component according to claim 3, whereby the first driving means ~~(13; 13x; 13y; 13z)~~ are capable of aligning the first and second central axes ~~(47)~~ to a common symmetry axis ~~(15)~~.

5. (Currently Amended) The beam optical component according to claim 1 ~~any one of the preceding claims~~, whereby the first driving means ~~(13; 13x; 13y; 13z)~~ are capable of aligning the first and second elements ~~(5; 7)~~ to be coaxially or parallel aligned.

6. (Currently Amended) The beam optical component according to claim 3 ~~any one of the preceding claims~~, whereby the charged particle lens ~~(1; 1000)~~ comprises second driving means ~~(42)~~ coupled to at least one of the second element ~~(9)~~ and the third element ~~(25)~~ for aligning the second opening ~~(11)~~ with respect to the third opening

~~(27).~~

7. (Currently Amended) The beam optical component according to claim 6, whereby the second driving means ~~(42)~~ are capable of aligning the second and third central axes ~~(47)~~ to a common symmetry axis ~~(15)~~.

8. (Currently Amended) The beam optical component according to claim 1 ~~any one of the preceding claims~~, comprising a charged particle beam source ~~(62)~~.

9. (Currently Amended) The beam optical component according to claim 8, whereby the charged particle beam source ~~(62)~~ comprises an extracting electrode ~~(60)~~ for extracting charged particles into a vacuum.

10. (Currently Amended) The beam optical component according to claim 2 ~~any one of the preceding claims~~, whereby at least one out of the third element ~~first, second and third elements (5; 7; 25)~~ is an electrode for focusing ~~focussing~~ the charged particle beam ~~(3)~~.

11. (Currently Amended) The beam optical component according to claim 10 ~~any one of the claims 2 to 10~~, whereby the third electrode ~~(25)~~ is positioned such as to serve as an extracting electrode ~~(60)~~.

12. (Currently Amended) The beam optical component according to claim 11 ~~any one of the claims 8 to 11~~, whereby at least one out of the first, second and third element ~~(5; 9; 25)~~ is shaped and positioned with respect to the charged particle beam source ~~(62)~~ to serve as a beam aperture ~~(50)~~ for the charged particle beam ~~(3)~~.

13. (Currently Amended) The beam optical component according to claim 6 ~~any one of the preceding claims~~, whereby at least one out of the first and second driving means ~~(13; 13x, 13y, 13z; 42)~~ is capable of moving the respective first or second element ~~(5; 9)~~ in a first direction laterally to their respective first or second central axes ~~(47)~~.

14. (Currently Amended) The beam optical component according to claim 13 ~~any one of the preceding claims~~, whereby at least one out of the first and second driving means ~~(13; 42)~~ is capable of moving the respective first or second element ~~(5; 9)~~

in a second direction perpendicular to the respective first or second central axis (47) and, preferably, perpendicular to the first direction.

15. (Currently Amended) The beam optical component according to claim 14 ~~any one of the preceding claims~~, whereby at least one out of the first and second driving means (13; 42) is capable of moving the respective first or second element (5; 9) into the directions of the respective first or second central axis ~~(47)~~.

16. (Currently Amended) The beam optical component according to claim 15 ~~any one of the preceding claims~~, whereby at least one out of the first and second driving means (13; 42) is capable of moving the respective first or second element (5; 9) at a spatial resolution of better than 10 micrometers, preferably better than 1 micrometer and even more preferred of better than 100nm.

17. (Currently Amended) The beam optical component according to claim 16 ~~any one of the preceding claims~~, whereby the charged particle lens (1; 1000) comprises at least one out of the first and second measuring means (30; 70) to measure the actual location of the respective first or second opening (7; 11) with respect to the second or third opening ~~(11; 27)~~.

18. (Currently Amended) The beam optical component according to claim 17 ~~any one of the preceding claims~~, whereby the charged particle lens (1; 1000) comprises electronic connections (38a; 38b; 38c) between at least one out of the first and second measuring means (30; 32) and the respective first or second driving means (13; 42) for feeding information of the measured location of the first or second opening (7; 11) to the first or second driving means (13; 42) to adjust the actual location to a desired location.

19. (Currently Amended) The beam optical component according to claim 18 ~~any one of the preceding claims~~, whereby at least one out of the first and second driving means (13; 42) are remotely controllable.

20. (Currently Amended) The beam optical component according to claim 19 ~~any one of the preceding claims~~, whereby at least one out of the first and second driving means (13; 42) comprises a precision motor drive, a stepping motor, a DC-motor, or a piezo-motor.

21. (Currently Amended) The beam optical component according to claim 20 ~~any one of the preceding claims~~, whereby at least one out of the first and second ~~elements electrodes (5; 9)~~ is an electrode shaped to comprise multiple openings ~~(7a; 7b; 7c)~~ for focusing ~~focussing~~ the charged particle beam ~~(3)~~.

22. (Currently Amended) The beam optical component according to claim 21, whereby at least one out of the first and second ~~elements electrodes (5; 9)~~ is shaped and positioned to provide that the distance of at least one of the multiple openings ~~(7a; 7b; 7c)~~ to an opening ~~(11; 27)~~ of an adjacent ~~second or third~~ electrode ~~(9; 25)~~ in axial direction is larger by at least ten percent compared to the distance in axial direction of at least one of the other of the multiple openings ~~(7a; 7b; 7c)~~ to said opening ~~(11; 27)~~.

23. (Currently Amended) The beam optical component according to claim ~~21 or~~ 22, whereby at least one out of the first and second ~~elements electrodes (5; 9)~~ is shaped such that a thickness of the rim ~~(8; 8a; 8b; 8c)~~ of at least one of the multiple openings ~~(7a; 7b; 7c)~~ is larger by at least a factor of two compared to a thickness of the rim ~~(8; 8a; 8b; 8c)~~ of at least one of the other multiple openings ~~(7a; 7b; 7c)~~ of said adjacent electrode.

24. (Currently Amended) The beam optical component according to ~~any one of the claims 21 to~~ claim 23, whereby at least two of the multiple openings ~~(7a; 7b; 7c; 11a; 11b)~~ of the first or second element electrode ~~(5; 9)~~ have essentially the same size.

25. (Currently Amended) The beam optical component according to claim 24 ~~any one of the preceding claims~~, whereby at least one out of the first, second and third openings ~~(7; 11; 27)~~ is rotationally symmetric with respect to its central axes ~~(47)~~.

26. (Currently Amended) The beam optical component according to claim 25 ~~any one of the preceding claims~~, whereby at least one out of the first, second and third openings ~~(7; 11; 27)~~ is rectangularly shaped.

27. (Currently Amended) The beam optical component according to claim 2 ~~any one of the claims 2 to 26~~, whereby the charged particle lens ~~(1; 1000)~~ comprises at least one distance piece ~~(40)~~ between the second element ~~(9)~~ and the third element ~~(25)~~ to provide for a minimum distance between said second element ~~9~~ and said third

element 25.

28. (Currently Amended) The beam optical component according to claim 27, whereby the charged particle lens (1; 1000) comprises at least one holding piece (53; 57) for abutting the second element (9) to the at least one distance piece (40), whereby the first holding piece is attached to the at least one distance piece.

29. (Currently Amended) The beam optical component according to claim 28 ~~any one of the claims 27 or 28~~, whereby the distance piece (40) is spherical.

30. (Currently Amended) The beam optical component according to claim 29 ~~any one of the claims 2 to 29~~, whereby the first or second driving means (43, 42) are connected to at least two of the first, second and third electrode (5, 9, 25).

31. (Currently Amended) The beam optical component according to claim 30 ~~any one of the claims 2 to 30~~, whereby the charged particle lens (1; 1000) comprises more than three elements that each have an opening for focusing ~~focussing~~ the charged particle beam; ~~(3); 32~~

32. (Currently Amended) The beam optical component according to claim 31 ~~any one of the claims 6 to 31~~, whereby the charged particle lens (1; 1000) comprises more than two driving means that are connected with the third element or one of the more than three elements.

33. (Currently Amended) The beam optical component according to claim 32 ~~any one of the claims 6 to 32~~, whereby at least one out of the first and second openings (7, 11) is smaller than the third opening (27) by a factor of two, preferably by a factor of ten and even more preferred by a factor of 50.

34. (Currently Amended) A charged particle beam device according to claim 33 for focusing ~~focussing~~ a charged particle beam onto a specimen (17) comprising a beam optical component (1; 1000) ~~according to any one of the preceding claims~~.

35. (Currently Amended) The charged particle beam device according to claim 34, comprising in addition:
a specimen holder (49) to hold the specimen (17) for inspecting or

structuring the specimen; and

a beam aperture to limit the aperture angle of the charged particle beam for inspecting or structuring the specimen~~(17)~~.

36. (Currently Amended) The charged particle beam device according to claim 35 ~~any one of the claims 34 to 35~~ whereby the beam optical component ~~(1; 1000)~~ is positioned between the specimen holder ~~(49)~~ and the beam aperture to focus the charged particle beam ~~(3)~~ onto the specimen~~(17)~~.

37. (Currently Amended) The charged particle beam device according to claim 36 ~~any one of the claims 34 to 36~~ comprising an objective lens and a charged particle beam source.

38. (Currently Amended) The charged particle beam device according to claim 37 ~~any one of the claims 34 to 37~~ whereby the beam optical component is positioned between the objective lens and the charged particle beam source.

39. (Currently Amended) Method of aligning a first opening ~~(7)~~ of a first element ~~(5)~~ with respect to a second opening ~~(11)~~ of a second element ~~(9)~~ for focusing ~~focussing~~ a charged particle beam ~~(3)~~ onto a specimen, comprising~~(17)~~ ~~with the steps:~~

a) ~~providing~~ a beam optical component according to claim 1 ~~38~~ ~~any one of the claims 1-33;~~

b) first scanning the charged particle beam ~~(3)~~ across the specimen ~~(17)~~ to generate a first image of the specimen ~~(17)~~ with a first set of voltages applied to the first element ~~(5)~~ and the second element ~~(9)~~ of the beam optical component;

c) second scanning the charged particle beam ~~(3)~~ across the specimen ~~(17)~~ to generate a second image of the specimen ~~(17)~~ with a second set of voltages applied to at least one out of the first element ~~(5)~~ and the second element ~~(9)~~ of the beam optical component;

d) ~~moving~~ the first element ~~(5)~~ with respect to the second element ~~(9)~~; and

e) repeating the second scanning the charged particle beam foregoing steps c), d) and e) ~~until~~ at least one structure element of the specimen ~~(17)~~ identified in the first image is identified in the second image.

40. (Currently Amended) The method according to claim 39 comprising ~~the~~

~~step of moving the second element (9) with respect to a third element (25) until at least one structure element of the specimen (17) identified in the first image is identified in the second image.~~

41. (Currently Amended) The method according to claim 40 ~~any one of the claims 39 to 40~~ whereby the first set of voltages and the second set of voltages are the same for at least one of the first, second and third elements.

42. (Currently Amended) The method according to claim 41 ~~any one of the claims 39 to 41~~ whereby at least one out of the first, second and third elements ~~(5; 9; 25)~~ is an electrode.

43. (Currently Amended) The method according to claim 39 ~~any one of the claims 39 to 42~~ whereby a charged particle beam ~~(3)~~ is generated by the ~~a~~ charged particle beam device ~~according to any one of the claims 34-38.~~